

Appl. No. 10/811,689  
Response Dated December 20, 2007  
Reply to Office Action dated July 20, 2007

Amendments to the Claims

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

Claim 1. (Original) An arcuate architectural component adapted for inclusion in an architectural structure, the arcuate architectural component comprising:

a flexible outer board that upon being bent forms a curved  
5 first outer surface of the arcuate architectural component, said  
flexible outer board including tongue-and-groove tracks formed  
along opposite longitudinal edges thereof;

a flexible inner board that upon being bent forms a curved  
second outer surface of the arcuate architectural component, said  
10 flexible inner board including tongue-and-groove tracks formed  
along opposite longitudinal edges thereof;

a first plurality of arcuate tiles that are adapted to be  
arranged for forming a third outer surface of the arcuate architec-  
tural component which spans between a longitudinal edge of said  
15 flexible outer board and a longitudinal edge of said flexible inner  
board, each of said first plurality of arcuate tiles having formed  
along peripheral edges thereof:

20                   an arcuate first tongue-and-groove that is adapted to  
                  mate and lock with a portion of the tongue-and-groove track of  
                  said flexible outer board; and

                  an arcuate second tongue-and-groove that is adapted to  
                  mate and lock with a portion of the tongue-and-groove track of  
                  said flexible inner board;

25                   whereby said first plurality of arcuate tiles, when all mated and  
                  locked with the tongue-and-groove tracks of said flexible outer  
                  board and with said flexible inner board form the third outer  
                  surface of the arcuate architectural component, said first  
                  plurality of arcuate tiles constraining the mating  
                  tongue-and-groove tracks of said flexible outer board and of said  
30                   flexible inner board into an arcuate shape; and

                  a second plurality of arcuate tiles that are adapted to be  
                  arranged for forming a fourth outer surface of said flexible outer  
                  board which spans between a longitudinal edge of said flexible  
                  outer board and a longitudinal edge of said flexible inner board,  
35                   each of said second plurality of arcuate tiles having formed along  
                  peripheral edges thereof:

                  an arcuate first tongue-and-groove that is adapted to  
                  mate and lock with a portion of the tongue-and-groove track of  
                  said flexible outer board; and

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40                   an arcuate second tongue-and-groove that is adapted to  
                  mate and lock with a portion of the tongue-and-groove track of  
                  said flexible inner board;  
                  whereby said second plurality of arcuate tiles, when all mated and  
                  locked with the tongue-and-groove tracks of said flexible outer  
45                   board and with said flexible inner board form the fourth outer  
                  surface of the arcuate architectural component, said second  
                  plurality of arcuate tiles constraining the mating  
                  tongue-and-groove tracks of said flexible outer board and of said  
                  flexible inner board into an arcuate shape.

Claim 2. (Original)       The arcuate architectural component  
of claim 1 wherein:

5                   said first plurality of arcuate tiles have a third  
                  tongue-and-groove formed along a peripheral edge thereof which  
                  spans between the first and the second tongue-and-grooves of said  
                  tiles, when said first plurality of arcuate tiles are assembled  
                  into said arcuate architectural component the third  
                  tongue-and-grooves of immediately adjacent tiles mating and locking  
                  together; and

10                  said second plurality of arcuate tiles have a third  
                  tongue-and-groove formed along a peripheral edge thereof which  
                  spans between the first and the second tongue-and-grooves of said

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15 tiles, when said second plurality of arcuate tiles are assembled into said arcuate architectural component the third tongue-and-grooves of immediately adjacent tiles mating and locking together.

Claim 3. (Original) The arcuate architectural component of claim 1 wherein pairs of tiles, a first tile of each pair belonging to said first plurality of arcuate tiles and a second tile of each pair belonging to said second plurality of arcuate 5 tiles, are formed as mirror images.

Claim 4. (Original) The arcuate architectural component of claim 1 wherein:

5 said flexible outer board also includes a series of serrulate slots that extend well into said flexible outer board, the slots extending transversely across said flexible outer board between the tongue-and-groove tracks formed along opposite longitudinal edges thereof to facilitate bending of said flexible outer board; and

10 said flexible inner board also includes a series of serrulate slots that extend well into said flexible inner board, the slots extending transversely across said flexible inner board between the tongue-and-groove tracks formed along opposite longitudinal edges thereof to facilitate bending of said flexible inner board.

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Claim 5. (Original) The arcuate architectural component of claim 1 wherein said flexible outer board, said flexible inner board, said first plurality of arcuate tiles and said second plurality of arcuate tiles are all formed from a solid plastic, 5 wood-alternative material.

Claim 6. (Original) An arcuate architectural component adapted for inclusion in an architectural structure, the arcuate architectural component comprising:

a plurality of flexible boards each of which includes 5 tongue-and-groove tracks formed along opposite longitudinal edges thereof, each tongue-and-groove track of each flexible board being adapted to mate together with and lock with one of the tongue-and-groove tracks formed along the longitudinal edge of the immediately adjacent flexible board when said flexible boards are 10 assembled to form said second arcuate architectural component;

whereby when said flexible boards are bent parallel to the tongue-and-groove tracks thereof and tongue-and-groove tracks of all flexible boards are all mated and locked with the tongue-and-groove tracks of immediately adjacent flexible boards 15 the assembled flexible boards form a column.

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Claim 7. (Original) The arcuate architectural component of claim 6 wherein said flexible boards also include a series of serrulate slots that extend well into said flexible boards, the slots extending longitudinally along said flexible board between 5 the tongue-and-groove tracks formed along opposite longitudinal edges thereof to facilitate bending of said flexible boards.

Claim 8. (Original) The arcuate architectural component of claim 6 wherein said flexible boards are formed from a solid plastic, wood-alternative material.

Claim 9. (Original) An architectural structure that includes an arcuate component, the arcuate architectural component comprising:

a flexible outer board that upon being bent forms a curved 5 first outer surface of the arcuate architectural component, said flexible outer board including tongue-and-groove tracks formed along opposite longitudinal edges thereof;

a flexible inner board that upon being bent forms a curved second outer surface of the arcuate architectural component, said 10 flexible inner board including tongue-and-groove tracks formed along opposite longitudinal edges thereof;

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a first plurality of arcuate tiles that are adapted to be arranged for forming a third outer surface of the arcuate architectural component which spans between a longitudinal edge of said 15 flexible outer board and a longitudinal edge of said flexible inner board, each of said first plurality of arcuate tiles having formed along peripheral edges thereof:

an arcuate first tongue-and-groove that is adapted to mate and lock with a portion of the tongue-and-groove track of 20 said flexible outer board; and

an arcuate second tongue-and-groove that is adapted to mate and lock with a portion of the tongue-and-groove track of said flexible inner board;

whereby said first plurality of arcuate tiles, when all mated and 25 locked with the tongue-and-groove tracks of said flexible outer board and with said flexible inner board form the third outer surface of the arcuate architectural component, said first plurality of arcuate tiles constraining the mating tongue-and-groove tracks of said flexible outer board and of said 30 flexible inner board into an arcuate shape; and

a second plurality of arcuate tiles that are adapted to be arranged for forming a fourth outer surface of said flexible outer board which spans between a longitudinal edge of said flexible outer board and a longitudinal edge of said flexible inner board,

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35 each of said second plurality of arcuate tiles having formed along peripheral edges thereof:

an arcuate first tongue-and-groove that is adapted to mate and lock with a portion of the tongue-and-groove track of said flexible outer board; and

40 an arcuate second tongue-and-groove that is adapted to mate and lock with a portion of the tongue-and-groove track of said flexible inner board;

whereby said second plurality of arcuate tiles, when all mated and locked with the tongue-and-groove tracks of said flexible outer 45 board and with said flexible inner board form the fourth outer surface of the arcuate architectural component, said second plurality of arcuate tiles constraining the mating tongue-and-groove tracks of said flexible outer board and of said flexible inner board into an arcuate shape.

Claim 10. (Original) The architectural structure that includes an arcuate component of claim 9 wherein:

5 said first plurality of arcuate tiles have a third tongue-and-groove formed along a peripheral edge thereof which spans between the first and the second tongue-and-grooves of said tiles, when said first plurality of arcuate tiles are assembled into said arcuate architectural component the third

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tongue-and-grooves of immediately adjacent tiles mating and locking together; and

10        said second plurality of arcuate tiles have a third tongue-and-groove formed along a peripheral edge thereof which spans between the first and the second tongue-and-grooves of said tiles, when said second plurality of arcuate tiles are assembled into said arcuate architectural component the third  
15 tongue-and-grooves of immediately adjacent tiles mating and locking together.

Claim 11. (Original)    The architectural structure that includes an arcuate component of claim 9 wherein pairs of tiles, a first tile of each pair belonging to said first plurality of arcuate tiles and a second tile of each pair belonging to said 5 second plurality of arcuate tiles, are formed as mirror images.

Claim 12. (Original)    The architectural structure that includes an arcuate component of claim 9 wherein:

      said flexible outer board also includes a series of serrulate slots that extend well into said flexible outer board, the slots 5 extending transversely across said flexible outer board between the tongue-and-groove tracks formed along opposite longitudinal edges thereof to facilitate bending of said flexible outer board; and

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10 said flexible inner board also includes a series of serrulate slots that extend well into said flexible inner board, the slots extending transversely across said flexible inner board between the tongue-and-groove tracks formed along opposite longitudinal edges thereof to facilitate bending of said flexible inner board.

Claim 13. (Original) The architectural structure that includes an arcuate component of claim 9 wherein said flexible outer board, said flexible inner board, said first plurality of arcuate tiles and said second plurality of arcuate tiles are all 5 formed from a solid plastic, wood-alternative material.

Claim 14. (Original) The architectural structure that includes an arcuate component of claim 9 further comprising a second arcuate architectural component, the second arcuate architectural component including:

5 a plurality of flexible boards each of which includes tongue-and-groove tracks formed along opposite longitudinal edges thereof, each tongue-and-groove track of each flexible board being adapted to mate together with and lock with one of the tongue-and-groove tracks formed along the longitudinal edge of the 10 immediately adjacent flexible board when said flexible boards are assembled to form said second arcuate architectural component;

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whereby when said flexible boards are bent parallel to the tongue-and-groove tracks thereof and tongue-and-groove tracks of all flexible boards are all mated and locked with the 15 tongue-and-groove tracks of immediately adjacent flexible boards the assembled flexible boards form a column.

Claim 15. (Original) The architectural structure that includes an arcuate component of claim 14 wherein said flexible boards also include a series of serrulate slots that extend well into said flexible boards, the slots extending longitudinally along 5 said flexible board between the tongue-and-groove tracks formed along opposite longitudinal edges thereof to facilitate bending of said flexible boards.

Claim 16. (Original) The architectural structure that includes an arcuate component of claim 14 wherein said flexible boards are formed from a solid plastic, wood-alternative material.

Claim 17. (Original) An architectural structure that includes an arcuate component, the arcuate architectural component comprising:

a plurality of flexible boards each of which includes 5 tongue-and-groove tracks formed along opposite longitudinal edges

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thereof, each tongue-and-groove track of each flexible board being adapted to mate together with and lock with one of the tongue-and-groove tracks formed along the longitudinal edge of the immediately adjacent flexible board when said flexible boards are 10 assembled to form said arcuate architectural component;

whereby when said flexible boards are bent parallel to the tongue-and-groove tracks thereof and tongue-and-groove tracks of all flexible boards are all mated and locked with the tongue-and-groove tracks of immediately adjacent flexible boards 15 the assembled flexible boards form a column.

Claim 18. (Original) The architectural structure that includes an arcuate component of claim 17 wherein said flexible boards also include a series of serrulate slots that extend well into said flexible boards, the slots extending longitudinally along 5 said flexible board between the tongue-and-groove tracks formed along opposite longitudinal edges thereof to facilitate bending of said flexible boards.

Claim 19. (Original) Claim The architectural structure that includes an arcuate component of claim 17 wherein said flexible boards are formed from a solid plastic, wood-alternative material.

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**Amendments to the Drawings**

Ten (10) formal drawing replacement sheets accompany this Response to the July 20th Office Action.

Accompanying formal drawing sheet eight of ten (8/10) includes an amendment to FIG. 7 of the informal drawings included in the patent application when originally filed. FIG. 7 in the informal drawings, that appears on original informal drawing sheet eight of nine (8/9), omitted reference number 138. To remedy this omission appearing in the informal drawings, reference number 138 appears in the accompanying formal drawing for FIG. 7.

The sentence in the pending patent application's text that begins on page 15 in line 23 establishes that adding reference number 138 to FIG. 7 of the formal drawings introduces no new matter into the patent application.

Attachment: Replacement Sheet

Annotated Sheet Showing Changes